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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/078,535	02/21/2002	Kazunori Komatsu	Q68390	3063

7590 08/26/2004

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Washington, DC 20037-3213

EXAMINER
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NEGRON, DANIEL L

ART UNIT	PAPER NUMBER
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2651

DATE MAILED: 08/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/078,535	<b>Applicant(s)</b> KOMATSU ET AL.	
	<b>Examiner</b> Daniell L. Negrón	<b>Art Unit</b> 2651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 21 February 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to because Figs 1, 4, and 5 fail to show the angles (i.e.,  $\alpha$  and  $\beta$ ) at which the magnetic field is applied as disclosed in the specification on pages 12 and 18. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ishida et al U.S. Patent No. 6,347,016 in view of Kawamura et al U.S. Patent No. 5,229,983.

Regarding claims 1-4, Ishida et al disclose a magnetic transfer method for applying a transferring magnetic field in a state that a master medium for magnetically transferring in which a magnetic layer is formed in a portion corresponding to information signals on a surface of a substrate (Fig. 1 and column 8, lines 29-43), and a magnetic recording medium which is a slave medium (82) for being magnetically transferred, are in close contact with each other, comprising the steps of applying a magnetic field to the slave medium in a track direction of a slave surface to initial DC magnetize the slave medium previously in the track direction (column 14, lines 31-35), bringing the master medium and the slave medium into close contact with each other and applying the transferring magnetic field in the track direction of a slave surface to execute a magnetic transfer (Fig. 8 and column 14, lines 49-63).

Ishida et al however fail to show a magnetic transfer method wherein an application angle of the transferring magnetic field is within a range of  $\pm 30^\circ$  in a vertical direction with respect to the slave surface or within a range of  $\pm 30^\circ$  with respect to the track direction on a plane parallel to the slave surface. Ishida et al further fails to show a magnetic transfer method wherein a sum of absolute values of an application angle of the transferring magnetic field in a direction vertical to the slave surface and an application angle of the transferring magnetic field with respect to the track direction on a plane parallel to the slave surface is within  $\pm 30^\circ$ .

However, Kawamura et al disclose a magnetic field generating method wherein the magnetic field is applied by magnets which can be arranged vertically above the slave surface at any angle (which would include any angle within the range of  $\pm 30^\circ$ ), which may be selected for

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the purpose of optimizing the distribution of the magnetic field (Fig. 20 and column 8, lines 6-13).

Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the magnetic transfer method disclosed by Ishida et al with the teachings of Kawamura et al in order to obtain a magnetic transfer method with wherein the magnetic field application angle is selected so as to optimize the distribution of the magnetic field.

#### ***Prior Art***

Nagao et al U.S. Patent No. 6,433,944 is cited as of interest for disclosure of a magnetic transfer method.

Odagiri Japanese Patent Publication No. 57-136061 is cited as of interest for disclosure of a magnetic transfer method comprising a magnetic field being applied at an angle with respect to the slave medium.

#### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniell L. Negrón whose telephone number is 703-305-6985. The examiner can normally be reached on Monday-Friday (8:30-6:00) Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh N. Tran can be reached on 703-305-4040. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DLN

  
August 20, 2004

  
**SINH TRAN**  
**PRIMARY EXAMINER**